IN THE CLAIMS

Please amend the claims as follows:

1-17.   canceled

18.   (previously presented) A method for organizing instructions within an application program to be executed in a processor having a plurality of interconnected computation nodes, said method comprising:

> partitioning said application program into a plurality of instruction groups; and

> assigning each of said instruction groups to a respective set of said interconnected computation nodes such that results yielded by an instruction within one of said instruction groups are sent directly to an instruction within another one of said instruction groups or an output operand associated with an instruction within one of said instruction groups is directly written to a register file to be read by an instruction within another one of said instruction groups as an input operand.

19.   (previously presented) The method of claim 18, wherein said partitioning and assigning are performed by a compiler.

20.   (previously presented) The method of claim 18, wherein said partitioning and assigning are performed by a run-time trace mapper.

21-27. canceled

28.   (currently amended) A computer storage medium having a computer program product for expressing dependency relationship of instructions within a program, said computer storage medium comprising:

computer program code for partitioning said application program into a plurality of instruction groups; and

computer program code for assigning each of said instruction groups to a respective set of ~~said~~ interconnected computation nodes such that results yielded by an instruction within one of said instruction groups are sent directly to an instruction within another one of said instruction groups or an output operand associated with an instruction within one of said instruction groups is directly written to a register file to be read by an instruction within another one of said instruction groups as an input operand.

29.   (currently amended) The computer storage medium of claim 28, wherein partitioning the program into the plurality of groups of instructions is performed by a compiler.

30.   (previously presented) The computer storage medium of claim 28, wherein partitioning the program into the plurality of groups of instructions is performed by a run-time trace mapper.

31-36. canceled